

**REMARKS**Amendments to the Specification:

The specification has been amended at page 3 and in the Abstract to reflect the fact that HASTELLOY® is a trademark for alloys. No new matter has been added.

Claim Amendments:

Claim 1 has been amended to recite that the alumina particles are applied to the coating while the coating is wet on the substrate and that the coating is adhered to the substrate. Support for this amendment can be found in the specification at page 3, lines 11-13 and lines 28-30. Claims 11-23 have been withdrawn. Claim 4 has been amended to remove the use of the trademark "HASTELLOY" and to insert the description of the alloy found on page 3, lines 4-5.

Election/Restriction:

Applicants affirm the provisional election made on April 15, 2005 in a telephone conference (with a follow-up call on June 27, 2005) between Richard Negin and the Examiner. Applicants elect with traverse the claims of Group I, claims 1-10. Applicants respectfully submit that it would not be an undue burden to examine both groups of claims. The claims of Group I relate to coated substrates in which alumina particles are applied to the coated substrate while the coating is wet on the substrate, while the claims of Group II relate to a method of forming such coated substrates.

Rejection of Claims Under 35 U.S.C. § 112:

The amendment to claim 4 removes the term "Hastelloy", and substitutes the description of the trademarked term for this term.

Rejection of Claims 1-5 Under 35 U.S.C. § 102(b)

Claims 1-5 were rejected as allegedly being anticipated by Blanchard et al. United States Patent No. 4,492,769 ("Blanchard"). Applicants respectfully traverse this rejection. Blanchard discloses substrates coated with a layer of a suitable oxide. Examples of such oxides include oxides of aluminum, magnesium, calcium, strontium, barium, scandium, yttrium, lanthanides, gallium, silicon, titanium, zirconium, hafnium, thorium, niobium, tantalum, chromium, iron, tungsten, manganese, and tin. (Blanchard, col. 2, line 64 through col. 3, line 2). A preferred coating is aluminum oxide. (Blanchard, col. 3, lines 1-2).

There is no teaching or suggestion in Blanchard of applicants' invention defined by claim 1. The Examiner has taken the position that the disclosure in Blanchard with respect to the various metal oxides that can be used in the metal coating, including aluminum oxide and silicon oxide "reads upon the claim limitation 'alumina-silicate coating thereon . . .'". The cited passage does not teach or suggest an alumina-silicate coating. As is well-known by the skilled artisan, a silicate is a compound containing silicon, oxygen and one or more metals. The disclosure relied upon by the Examiner relates to coatings that contain individual metal oxides, not silicates or aluminum silicates as required by applicants' claims 1-10.

Blanchard appears to describe an alumina or other oxide coating directly on a substrate, but there is no teaching or suggestion of an alumina-silicate coating. Furthermore, amended claim 1 now contains the limitation that the alumina-silicate coating has alumina particles applied to the coating while the coating is wet on the substrate. There is no teaching or suggestion of such a structural limitation in Blanchard.

Rejection of Claims 1-5 and 9 under 35 U.S.C. § 102(b)

Claims 1-5 and 9 were rejected as allegedly being anticipated by Lachman et al. United States Patent No. 5,244,852 ("Lachman"). Applicants respectfully traverse this rejection. Lachman discloses catalyst substrates coated with a zeolite and alumina binder mixed in slurry form. (Lachman, col. 2, lines 26-27). There is no teaching or suggestion in Lachman of a metal substrate having an alumina-silicate coating thereon and alumina particles applied to the coating while the coating is wet on the substrate. Lachman teaches away from applicants' claimed invention in that Lachman teaches to mix the alumina binder and zeolite together in a slurry to be applied to the substrate.

Rejection of Claims 6-8 and 10 Under 35 U.S.C. § 103(a)

Claims 6-8 and 10 were rejected as allegedly being obvious over Blanchard or Lachman. Applicants' respectfully traverse this rejection.

For at least the reasons provided above with respect to the Blanchard and Lachman references, the combined teachings of Blanchard and Lachman fail to disclose or suggest applicants' claimed invention. As noted above, Lachman teaches away from

the claimed invention as there is no disclosure to suggest applying alumina particles to an alumina-silicate coating on a metal substrate while the coating is wet. As noted in applicants' specification, exhaust emission treatment catalyst compositions do not adhere well to the surface of alumina-silicate bond coats (Applicants' specification at page 3, lines 14-17). Application of alumina particles to the alumina-silicate bond coat while the coating is wet improves the adherence of the exhaust emission treatment catalyst to the coated metal substrate. In Example 1 of applicants' specification, when the alumina particles were mixed in the coating and applied to the metal substrate, the subsequent wash coat slurry did not adhere to the surface of the substrate. (applicants' specification, page 6, lines 17-19). On the other hand, in Example 2, when the particles were applied to the alumina-silicate coating while the coating was still wet, the subsequently applied washcoat adhered to the substrate and performed well for about 300 hours when it was close-coupled engine aged on a stationary generator. (Applicants' specification page 7, lines 1-5).

Blanchard and Lachman fail to teach or suggest applicants' claimed invention. There is no teaching or suggestion to apply alumina particles having the particle size range claimed by applicants to the substrate while the alumina-silicate coating is wet. Applicants respectfully request withdrawal of the rejection.

#### Conclusion

Reconsideration of the above-referenced patent application in view of the foregoing amendment is respectfully requested. A petition for a two-month extension of time is enclosed. If any

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other fees are due, however, the USPTO is authorized to charge Deposit Account No. 50-3329.

The undersigned was authorized by Richard A. Negin, Reg. No. 28,649, an attorney of record in the subject application, to prepare and file this Amendment on behalf of the Assignee. Correspondence should continue to be directed to Chief Patent Counsel, Engelhard Corporation, 101 Wood Avenue, P.O. Box 770, Iselin, NJ, 08830-0770.

Respectfully submitted,



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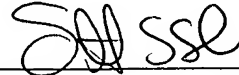
Date November 30, 2005

By



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CERTIFICATE UNDER 37 CFR 1.10: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express Mail No. ED 552 622 565 US, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on November 30, 2005.



Signature: Scott S. Servilla